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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,461

03/25/2004

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Q80447

4863

23373 7590 05/15/2008
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EXAMINER

WANG, KENT F

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

05/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,461	Applicant(s) ISHIYAMA ET AL.	
	Examiner KENT WANG	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 04/01/2008, have been entered and made of record. Claims 1-25 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-5, 9-10, 13-14, 16, and 20-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura (US 4,622,682) in view of Farrell (US 2004/0150840).

Regarding claim 1, Kumakura discloses a print system (a facsimile communication system) having a transmitter and a receiver, said system comprising:

- first communication means (high speed modems 13, 23, Fig 1) for conducting high-speed radio data-communication between said printer controlling device (a transmitter 1, Fig 1) and said printer (a receiver 2, Fig 1), the predetermined data segment (image data) being transferred from said printer controlling device (1) to

said printer (2) by using said first communication means (13 and 23) (col. 2, lines 35-47); and

- second communication means (low speed modem 12, 22, Fig 1) for conducting low-speed radio data-communication between said printer controlling device (a transmitter 1, Fig 1) and said printer (a receiver 2, Fig 1), the other data segment (various control signal) being transferred from said printer controlling device (1) to said printer (2) by using said second communication means (12 and 22) (col. 2, lines 35-47).

Kumakura does not disclose the printer performs a print job based on the predetermined data segment and the other data segment. However Farrell discloses the printer (an image data sink 490, Fig 4) performs a print job based on the predetermined data segment (image data) and the other data segment (set-up information) ([0018], [0031], Farrell).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the printer as taught by Farrell into Kumakura's communication system, as to make processing of a raster image data file more efficient by segmenting the raster image data file ([0007], Farrell).

Regarding claim 2, the limitations of claim 1 are taught above, Kumakura discloses first communication means is turned off when the data communication of the predetermined data segment is not conducted (the transmitter 1 includes a block data generator 14 as connected to the transmission controller 11 and high speed modem 13, and, then, a start flag, a stop flag, a control bit and a CRC code are added to each of the block data thus formed and the block

data added with additional information are supplied to the high speed modem 13) (col. 2, lines 48-58).

Regarding claim 3, the limitations of claim 1 are taught above, Kumakura discloses the predetermined data segment concerns image data (image data) and the other data segment concerns setting data (various control signals) for defining print conditions (col. 2, 35-58).

Regarding claim 4, the limitations of claims 1 and 3 are taught above, Farrell discloses printer controlling device is a digital camera (output from a digital camera) for producing said image data by photographing a subject and for producing said print data by adding the print-setting data to the image data (the image data is provided in a form of an image data file, which is constructed from set-up information and associated image data) ([0036]).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the camera as taught by Farrell into Kumakura's communication system, as to use the metadata to modify the structure of the image and to improve the quality of the image when rendering the image ([0036], Farrell).

Regarding claim 5, Kumakura discloses a first communication means is a pair of first radio interfaces (high speed modems 13 and 23, Fig 1) for conducting said high-speed radio communication, and said second communication means is a pair of second radio interfaces (low speed modems 12 and 22, Fig 1) for conducting said low-speed radio communication (col. 2, lines 35-58).

Regarding claim 9, this claim differs from claim 1 only in that the claim 1 is a "print system" claim whereas claim 9 is a "printer" claim. Farrell discloses a print system (systems

for structuring a raster image data file) having a printer (an image data sink 490, Fig 4). Thus the claim 9 is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claims 10 and 14, these claims recite same limitations as claim 5. Thus they are analyzed and rejected as previously discussed with respect to claim 5 above.

Regarding claim 13, this claim differs from claim 1 only in that the claim 1 is a “print system” claim whereas claim 13 is a “printer controlling device” claim. Kumakura discloses a print system (a facsimile communication system) having a printer controlling device (a transmitter 1, Fig 1). Thus the claim 13 is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 16, Farrell discloses the printer controlling device is a digital camera (a digital camera ([0036])).

Regarding claim 20, Kamakura discloses the first communication means and said second communication means are operable at frequencies less than 3 terahertz (the described response signals are signals in a frequency band, e.g., 330 Hz or 3,300 Hz) (col. 3, lines 49-55).

Regarding claims 21 and 22, these claims recite same limitations as claim 20. Thus they are analyzed and rejected as previously discussed with respect to claim 20 above.

Regarding claim 23, Farrell discloses the printer performs a print job based on the received image data (image data) and the received print-setting data (set-up information) ([0018]).

Regarding claim 24, this claim recites same limitations as claim 23. Thus it is analyzed and rejected as previously discussed with respect to claim 23 above.

Regarding claim 25, Kamakura discloses the first communication means (high speed modems 13 and 23, Fig 1) and the second communication means (low speed modems 12 and 22, Fig 1) conduct the high-speed radio data-communication and the low-speed radio data-communication according to different communication standards, respectively (a cyclic redundancy checking (CRC) code are added to each of the block data thus formed and the block data added with additional information are supplied to the modem) (col. 2, lines 48-58).

5. Claims 2, 12, 15, and 17-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Farrell, and further in view of Ozawa (US 2003/0016378).

Regarding claim 2, the limitations of claim 1 are taught above, Ozawa discloses communication means is turned off (stop power supply, S1316, Fig 28) when the data communication of the predetermined data segment (the data data stored in correspondence with the image data) is not conducted ([0159]-[0161], Ozawa).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the power switch devices as taught by Ozawa so as to stop power supply to the to the communication system when the transmission of image data is not conducted ([0161], Ozawa).

Regarding claim 12, Ozawa discloses print-setting data of print data includes information concerning a print size (paper size), an image-quality mode (color matching mode) and a printing direction (see Fig. 12, steps S72 and S74, and also [0084], [0078], and [0079], Ozawa).

Thus, it would have been obvious to one of ordinary skill in the art to have included the print-setting data of print data as taught by Ozawa into Izumi's picture communication system, as to allow a printing apparatus to print an image sensed by a digital camera without requiring any complicated operation ([0011], Ozawa).

Regarding claim 15, this claim recites same limitations as claim 12. Thus it is analyzed and rejected as previously discussed with respect to claim 12 above.

Regarding claims 17, 18, and 19, these claims recite same limitations as claim 2. Thus they are analyzed and rejected as previously discussed with respect to claim 2 above.

6. Claims 6-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Farrell, and further in view of Otsuka (US 2002/0140963).

Regarding claim 6, the limitations of claims 1-5 are taught above, Kumakura and Farrell do not disclose the first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth.

However, Otsuka discloses a print system first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth (Otsuka, [0133]).

Kumakura, Farrell and Otsuka are analogous art because they are from the same field of data communication between printer controlling device and printer. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Otsuka's wireless communication in Kumakura and Farrell's system. The

suggestion/motivation would have been to enable the printer has a communication system according to IEEE 802.11 or Bluetooth (Otsuka, [0068]).

Regarding claim 7, this claim recites same limitations as claim 6. Thus it is analyzed and rejected as previously discussed with respect to claim 6 above.

7. Claims 8 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumakura in view of Farrell, and further in view of Omura (US 6,999,113).

Regarding claim 8, Kumakura and Farrell disclose a print system having a printer controlling device and a printer, which performs printing on the basis of print data including a plurality of data segments inputted from printer controlling device. Kumakura and Farrell do not disclose the printer has a battery as a power source so as to be portable. However Omura discloses a printer has a battery as a power source so as to be portable (battery chamber lid 22 and battery pack 24) (Omura, col. 4, lines 12-16).

Kumakura, Farrell and Omura are analogous art because they are from the same field of printer for outputting image data. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Omura's battery chamber and battery pack in Kumakura and Farrell's system. The suggestion/motivation would have been to enable the printer has a capability to connect to some external apparatuses for exchanging image data from each other. It is also possible to power the portable instant printer from the net through an AC adapter or the like (Omura, col. 4, lines 12-17).

Regarding claim 11, this claim recites same limitations as claim 8. Thus it is analyzed and rejected as previously discussed with respect to claim 8 above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Szabelski (US 2004/0168001), Ozawa et al. (US 6,115,137), Yoshida et al. (US 6,690,417), Niida et al. (US 6,996,096), and Parulski et al. (US 7,038,714).
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW
9 May 2008

*/Ngoc-Yen T. VU/
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